



# MODIS/VIIRS Sea-Ice Leads

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## MODIS Sea-Ice Leads Product

- 2002-2019 dataset available at <ftp://frostbite.ssec.wisc.edu>
- Winter 2019-2020 dataset available by request, pending QA review

## VIIRS Sea-Ice Leads Product

- Winter 2019-2020 dataset available by request, pending QA review

## Status and Updates:

- Collected an 18-year (Nov 2002 -present) set of Arctic lead coverage.
- Developed and published a description of the lead detection alg. Compared results to some previous work done by others with MODIS and passive microwave data.
- Adapted the algorithm to VIIRS and began a comparison with MODIS.

## Future Plans:

- Document and map the spatial and temporal distributions of sea ice leads (fractures) in the Arctic.
- Determine any changes and trends in the lead distributions and properties (concentration, width, and orientation).
- Correlate observed changes in leads with atmosphere and ice conditions.
- Provide a constraint on sea ice concentration for climate simulations.

## Recent Publications:

Hoffman, J.P.; Ackerman, S.A.; Liu, Y.; Key, J.R. The Detection and Characterization of Arctic Sea Ice Leads with Satellite Imagers. Remote Sens. 2019, 11, 521.

